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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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09/716,854

11/17/2000

Hung Duy Vo

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01/25/2005

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EXAMINER

CHO, HONG SOL

ART UNIT

PAPER NUMBER

2662

DATE MAILED: 01/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/716,854

Applicant(s)

VO ET AL.

Examiner

Hong Cho

Art Unit

2662

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 September 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5-14 and 16-19 is/are allowed.
- 6) ☒ Claim(s) 1-4, 15, and 20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The following is a response to the amendments filed on 09/17/2004.

Claims 1-20 are pending in the instant application.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4, 15, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over C Liu et al (US 5,754,540) in view of S Liu et al (US 6,574,664) hereafter C Liu and S Liu, respectively.

Regarding claims 1 and 20, C. Liu discloses a method of communicating on a network medium, comprising forming a frame in software; C. Liu discloses transmitting the frame to a network medium interface device which has a pair of media access controllers (MACs) (a multiport repeater in figure 1 that manages the physical layer transmit for a

plurality of medium dependent interfaces such as MACs 30, 31. The MACS are controlled by management frame 33: for example see col 3 lines 48-60); C. Liu discloses determining a selected MAC of the MACs which is to be used to transmit the frame (a TX or FX MAC is selected for transmission based on a bit in the management frame. see bits 8-15 of register 17 on col 200 where I=TX MAC and O=FX MAC; col 4 lines 21-28); and C. Liu discloses transmitting the frame onto the network medium using the selected MAC (a value of 1 enables transmit; see bits 0-7 of register 17 on col 20- 21). C. Liu fails to expressly disclose the use of a node discovery block. S. Liu discloses a method and apparatus for a node discovery block (local discovery node 132 in figure 5: discovery node has the capability to obtain, retain, and communicates node capability information regarding a destination node of a frame; col 4 lines 44-50). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify C. Liu's apparatus to utilize a node discovery block to determine the MAC to transmit the frame, as taught by S. Liu. The motivation is a more efficient system that can retrieve MAC information quicker through address manageability, as explained by S. Liu on column 1, lines 33-47 and column 2, lines 6- 12.

Regarding claim 2, C. Liu discloses where the determining includes the network medium interface device checking the frame for embedded MAC selection information (checking the management frame for access 17 for selection of the TX or FX MAC; col 3 lines 56-58).

Regarding claim 3, C. Liu discloses where the checking includes checking the frame for a first bit which indicates whether the MAC selection information has been embedded (checking for bits 0-7 of register 17 for port enabled).

Regarding claim 4, C. Liu discloses where the determining includes, if the first bit indicates that the MAC selection information has been embedded in the frame (if bits 0- 7 of register 17 indicates the port is enabled), checking a second bit of the frame, and using the value of the second bit to determine the selected MAC (checking bits 8- 15 of register 17 and using the value of this bit to determine TX MAC if 1 and FX MAC if 0).

Regarding claim 15, C. Liu discloses where the network medium includes telephone lines (unshielded twisted pair; col 1 line 56).

Allowable subject Matter

4. Claims 5-14 and 16-19 are allowable.

The following is an examiner's statement for reasons for allowance.

5. Claim 5 is allowable over the prior art of record since the cited references taken individually or in combination fails to particularly disclose querying a node discovery block for node capability information regarding a destination node of the frame.

Claim 10 and 12 are allowable over the prior art of record since the cited references taken individually or in combination fails to particularly disclose embedding in the frame MAC selection information regarding a destination node of the frame, if the software has available to it node capability information regarding the destination node.

Claim 16 is allowable over the prior art of record since the cited references taken individually or in combination fails to particularly disclose querying a node discovery block for node capability information regarding a destination node of the frame, and using the node capability information to determine the selected MAC.

Response to Arguments

6. On pages 9-10, the Applicant argues that the combination of C. Lui with S. Lui would not result in the inventions as claimed by indicating that “the capability to determine an IP and a MAC address is not equivalent to node capability information that includes at least one of protocols ...”. The Examiner respectfully disagrees. It should be noted that the node discovery procedure uses SNMP associated with a MIB that stores objects and or variables representing different characteristics of a resource in a number of tables.

The Applicant argues that claim 1 as amended includes the node discovery block obtaining, retaining and communicating node capability information, used to select a MAC, of a destination node. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the node discovery block used to select a MAC) are not recited in the rejected claim. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant's arguments with respect to claims 5, 10, 12, and 16 have been fully considered and are persuasive. The rejection of claims 5, 10, 12, and 16 has been withdrawn.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no, however, event will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hong Cho whose telephone number is 571-272-3087. The examiner can normally be reached on Mon-Fri during 7 am to 4 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on 571-272-3088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-3088. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hong Cho
Patent Examiner
1-11-2005



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